



2007 Calif. Building Code NEW Residential Provisions (that we know of so far.....)

STATE STREET

Available Online

- ◆ www.iccsafe.org
- ◆ www.buildersbook.com
- ◆ Volumes 1 & 2
 - Vol. 2 not just for engineers

Effective Use of the CBC

- ◆ “Introduction”
- ◆ Pages vii through xv
- ◆ Required reading for our Plan Check Staff.

Administration – Appendix 1

- Fire-fighter safety listed in Intent
- Construction Documents
 - Means of Egress Plan. 106.1.2.
- Design Professional in responsible charge – 106.3.4.
 - Used when multiple design professionals
 - Similar to “General Contractor”

Administration – Appendix 1

◆ Inspections - 109

– 10 mandatory (up from 5)

- Footing/Foundation
- Slab/Under-floor
- Lowest Floor Elevation (Flood Zones)
- Framing
- Lath/Plaster

Administration – Appendix 1

- Fire Rated Penetrations
 - Energy Efficiency Inspection Req'd
 - Other –
 - Special Inspections (from Chapt. 17)
 - Final Inspection
- ◆ Certificate of Occupancy
- R-3's no longer exempt.

General Code Provisions

Chapter 1

- ◆ State Agencies that make changes to the code.
- ◆ Lists enforcement authority
- ◆ All State changes are in italics. Plain text is IBC.

Definitions – Chapter 2

- “Townhouse”
 - 3 or more attached units where
 - Unit extends from foundation to roof
 - Two open sides
 - Considered an R-3
 - Condo's are R-2s
- Most definitions in 202 refer to other Chapters

Group Rs Defined – Section 310

- ◆ R-1 = Hotels, Motels
- ◆ R-2 = Apts, Boarding Houses, Condo's, Vacation Timeshares
- ◆ R-3 = SFR & Duplexes, Townhomes

Townhouses – 419.4

- ◆ Shall be considered separate building when;
 - Each have 1 hr separation wall
 - Openings not permitted
 - Penetrations comply w/705.9
 - Exc. – may use single 2 hr wall if not containing plbg or mech equip, ducts or vents. Elec penetrations per 712.
 - Not separate for accessibility purposes.
- ◆ Requirements for parapets
- ◆ Structural Independence (w/exceptions)

Occupancy Separation - 419

- ◆ Shall comply with Sect. 708
 - Requires 1 hr rating
 - Except buildings of Type IIB, IIIB & VB w/ sprinklers (903.3.1.1) can be ½ hr rated.
 - See also Townhouses – 419
- ◆ See also Table 508.3.3

U-1/R3 Separation – 406.1.4

- ◆ 1/2" GWB vertical
- ◆ 5/8" Type X GWB horizontal
 - No requirement to protect supporting framing.
- ◆ Doors are same except also must be self-latching.
- ◆ No requirement between carport that is open on 2 sides with no uses above.
- ◆ No definition of "Carport" or "Private Garage"

Allowable Height, Area

- ◆ Table 503
- ◆ Unlimited Area
- ◆ Stories & Height per Construction type
- ◆ Sprinklers –
 - add 20 ft height for full NFPA13 system (903.3.1.1)
 - Some exceptions per T 601 footnote “e”

Laundry/Storage Rooms

- ◆ Incidental Use – 508.2
- ◆ No separation required when within and serving a dwelling unit
- ◆ Otherwise see Table 508.2

Exterior Walls – Section 704

- ◆ “Fire Separation Distance” – measured at right angle from face of wall to property line. 702.1
- ◆ Fire-resistance ratings, Section 704.5 refers to Table 601 & 602
 - <5 ft requires 1 hr wall (R3 & U1)
 - >5 ft. NA (R3 & U1)
- ◆ Structural Stability – shall remain in place for duration of fire rating.

Opening Protection – T 704.8

- ◆ Based on percentage of wall area and Fire Separation Distance.
- ◆ R-3's –
 - 25% protected or unprotected openings 3-5' FSD.
 - Unlimited greater than 5 ft.

Shafts – Sect. 707

- ◆ Exception #1 – Not required if totally within a dwelling unit and connecting four stories or less.

Fire Blocking – 717.2

- ◆ Integrity must be maintained
- ◆ Loose fill not allowed unless it can remain in place and retard spread of fire & hot gases.
- ◆ In stairs, only req'd at top and bottom

Draft Stops in Floor/Ceilings

- ◆ Section 717.3
- ◆ Located above & in line w/dwelling unit and sleeping unit separations
 - Exc. 1 – 903.3.1.1 sprinklers
 - Exc. 2 – 903.3.1.2 if sprinklers also in comb. concealed spaces

Draft Stops in Attics

- ◆ Section 717.4
- ◆ 3000 sq. ft. area in other than R-1 & R-2s
- ◆ R-2 – 3 or more dwellings & all R-1's
 - In line with dwelling and sleeping unit walls if not extending to roof sheathing

Sprinklers – 903.2.7

- ◆ Not required in R-3's less than 4 stories above grade plane
- ◆ Not req'd in U-1s accessory to an R-3

Smoke Alarms 907.2.10

- ◆ Interconnected such that when 1 activates, all alarms in that unit activate. 907.2.10.3
- ◆ Same addition and existing upgrade requirements as now.

High Fire Hazard Areas – 7A

- ◆ (For SB) Roof requires Class A or Non-combustible material in HFHA
- ◆ Eave vents allowed w/ 1/4" mesh. No limitation on location.
- ◆ Eaves must be "boxed in."
- ◆ Exterior walls of non-combustible or ignition resistant material (see definitions).

Doors – Section 1008

- ◆ 78" min ht. within dwelling unit
- ◆ 76" min ht. for exterior doors, other than required exit (1).
- ◆ No minimum or maximum width for interior doors if not req'd to be accessible.

Landings – 1008.1.4

- ◆ Max 7.75" step at exterior doors and at top of stairs where door does not swing over step.
- ◆ Measured from top of threshold

Thresholds – 1008.1.6

- ◆ Max $\frac{3}{4}$ " for sliding doors
- ◆ Max. $\frac{1}{2}$ " for all other doors.
 - Beveled over $\frac{1}{4}$ "

Stairs – 1009.3

- ◆ Max Rise = $7 \frac{3}{4}"$
- ◆ Min Run = $10"$
- ◆ Nosing
 - $\frac{3}{4}"$ – $1 \frac{1}{4}"$ if solid riser and less than $11"$ tread

Stairs (cont.)

- ◆ Winders allowed in lieu of mid flight landings at change of direction 1009.3.2 exc. #2
- ◆ Under stair space allowed to be protected by ½" GWB if serving and completely within dwelling unit. 1009.5.3 exception.

Stairs (cont)

- ◆ Enclosed space under exterior spaces may be used if 1 hr rated enclosure. 1009.5.3.
- ◆ Open space under exterior stairs not allowed to be used for any purpose. 1009.5.3

Stairs (cont)

- ◆ Spiral stairs allowed to serve unlimited area within dwellings.
1009.8
- ◆ Up to 250 sq. ft. in other occupancies.

Handrails

- ◆ Not req'd for R-3 stairways less than 4 risers.
1009.10 exc. 4
- ◆ Circular ;
 - 1 ¼" – 2" cross section
- ◆ If not circular;
 - Min perimeter of 4", max 6 ¼".
 - Max cross-section of 2 ¼".
 - No 2x6 with dado.

Handrails (cont)

- ◆ Hand-gripping surface shall be continuous without interruption
 - Brackets attached to bottom of handrail that do not extend horizontally w/in 1 ½" of the bottom are not considered an obstruction

Guards – Sect 1013

- ◆ Min 42" above walking surface
- ◆ Except w/in R-3 & R-2's, may use handrail as top of guard (34" – 38")
- ◆ Openings not greater than 4.375 inches (4 3/8") for guards within R-3 & R-2's.

Escape Openings - 1026

- ◆ Net 5 sq. ft. for openings at grade floor.
 - Defined as – “sill ht of the opening is not more than 44” above or below the finished ground level adjacent to the opening.
- ◆ Specs for window well ladder now provided.

Interior Environment – Chapt 12

- ◆ Natural ventilation based on 4% of floor area
 - Mech ventilation OK
- ◆ Natural light based on 8%
 - Artificial light based on 10 ft-candles 30" off floor.
- ◆ Bathroom vents min. 50 ft³/min intermittent, or 20 ft³/min continuous.
- ◆ Heating to 68° at 3'.

Attic Ventilation – Chapt 12

- ◆ Attic access = 20" x 30" – 1209.2
- ◆ Venting enclosed rafter bays now mandatory. 1203.2
- ◆ Definition – "Space between ceiling beams of the top story and the roof rafters." 202.

Garage Door Springs – 1211

- ◆ Applies to SFR as well as Apt.'s, Hotels, and Motels,
- ◆ Must be ASTM A 227-71 tested.
- ◆ Must be permanently identified as to manufacturer, max. stretch, and state "Manufactured in accordance with the requirements of Cal HCD."

Exterior Wall Coverings 1404.2

- ◆ One layer No. 15 asphalt felt complying with ASTM D226 for Type 1 felt behind all wall finishes.

Window Sills – 1405.12.2

- ◆ R-2s & R-3s – Openable windows with sills more than 6' above exterior grade or other surface, are required to have a sill 24" AFF of the inside room
- ◆ Fixed glazing required below 24" or provide a guard (rail) or an ASTM F2006 approved guard.

Special Inspections

- ◆ R-3's exempt from ALL. 1704 exc. #3.
- ◆ 1707.3 – requires periodic SI for nailing, bolting, anchoring & other fastening of components LFRS, including shearwalls, diaphragms, etc.
 - Exception for nailing $> 4"$ o.c.

Safety Glazing – 2406.3

- ◆ Not required next to door where area (closet, storage, etc) to be accessed is less than 3 feet in depth.

Conventional Construction

- ◆ Completely different.
- ◆ Read 2308.
- ◆ Separate presentation.